

## I CLAIM:

- 1           1.     A portable digital video player, comprising:  
2                 a storage medium for storing compressed video information;  
3                 a media decoder transforming compressed input video information  
4                 presented in a proprietary format into non-proprietary compressed video information,  
5                 and decompressing the non-proprietary compressed video information into  
6                 decompressed audio and video portions;  
7                 a user input device for instructing the media decoder to retrieve from  
8                 the storage medium and decompress a selected item of non-proprietary compressed  
9                 video information into decompressed audio and video portions;  
10                a display displaying the decompressed video portion received from the  
11                media decoder in real time; and  
12                at least one of a speaker and a headphone jack for reproducing the  
13                decompressed audio portion received from the media decoder in real time.
- 1           2.     The portable digital video player according to claim 1, wherein the  
2                 user input device and display are integrated into a touch screen display.
- 1           3.     The portable digital video player according to claim 1, wherein the  
2                 media decoder transforms input video data from a proprietary format to a  
3                 nonproprietary compressed video format by copying a video content portion of an  
4                 input proprietary compressed video file to a separate memory location and by not

5 copying a header of the input proprietary compressed video file to the separate  
6 memory location.

1 4. The portable digital video player according to claim 1, wherein the  
2 media decoder transforms input video information from a proprietary format to a  
3 nonproprietary compressed format by decrypting the input video data prior to storing  
4 said non-proprietary compressed video information.

1 5. The portable digital video player according to claim 1, wherein the  
2 media decoder transforms input video information from a proprietary format to a  
3 nonproprietary compressed format and stores the nonproprietary compressed format  
4 on the storage medium.

1 6. The portable digital video player according to claim 1, wherein the  
2 media decoder receives and stores proprietary compressed information on the storage  
3 medium, and transforms and decompresses the proprietary compressed video  
4 information on-the-fly to decompressed audio and video portions.

1 7. The portable digital video player of Claim 1, wherein the storage  
2 medium has the capacity to store at least 20 Gigabytes of compressed video data.

1 8. The portable digital video player of Claim 1, wherein the  
2 nonproprietary compressed video information is in a format selected from the group  
3 consisting of MPEG-1, MEG-2, MPEG-4, MPEG-7 and AVI.

1           9.     The portable digital video player of Claim 1, and further comprising a  
2     unitary, nonhinged case for containing the storage medium, the media decoder, the  
3     user input device and the display.

1           10.    The portable digital video player of Claim 1, and further comprising a  
2     case having first and second panels, the first panel of the case containing the display,  
3     the second panel of the case hinged to the first panel and containing the media  
4     decoder and the storage medium.

1           11.    A self-contained portable media player for receiving compressed  
2     digital audiovisual data files from a personal video recorder, each of said files having  
3     a proprietary header, comprising:

- 4                   a port for receiving input compressed digital audiovisual data files;
- 5                   a media processor coupled to the port for receiving the input
- 6     compressed digital audio visual data files, the media processor removing the
- 7     proprietary header from each file by copying video content of the file to another
- 8     memory location the media processor thereby producing standard format compressed
- 9     digital audiovisual files;
- 10                  a read/write nonvolatile memory unit coupled to the media processor
- 11     for storing the compressed standard format digital audiovisual files;
- 12                  a display coupled to the media processor;
- 13                  at least one audio output coupled to the media processor; and

14 a user interface coupled to the media processor, the media processor  
15 retrieving and decompressing a selected compressed digital audiovisual file  
16 responsive to the user interface to create decompressed audio and video data streams  
17 and transmitting the decompressed audio and video data streams respectively to the  
18 audio output device and the display for play.

1 12. The portable media player of Claim 11, and further comprising a  
2 unitary, nonhinged case for containing the media processor, the nonvolatile memory  
3 unit, the display and the user interface.

1 13. The portable media player of Claim 11, and further comprising a case  
2 having first and second panels, the first panel of the case containing the display, the  
3 second panel of the case hinged to the first panel and containing the media processor  
4 and the nonvolatile memory unit.

1 14. A system for time- and place-shifting the playback of a video data file,  
2 comprising:  
3 a personal video recorder for storing timeshifted video data, a port on  
4 the personal video recorder for transmitting at least one selected data file of the  
5 timeshifted video data in a proprietary compressed format; and  
6 a self-contained portable player for playing back said at least one  
7 selected data file, the player including  
8 a port for receiving said at least one selected data file in the proprietary  
9 compressed format;

10 a media processor coupled to the port for transforming the received  
 11 data file from the proprietary compressed format to a nonproprietary compressed  
 12 format;  
 13 a read/write nonvolatile memory unit coupled to the media processor  
 14 for storing the data file in one of the proprietary and the nonproprietary format;  
 15 a display coupled to the media processor;  
 16 at least one audio output coupled to the media processor; and  
 17 a user interface coupled to the media processor, the media processor  
 18 retrieving a stored compressed data file responsive to a command from the user  
 19 interface, decompressing the compressed data file to decompressed video and audio  
 20 data streams and transmitting the data streams respectively to the display and the  
 21 audio output for play.

1 15. A method for time and place shifting a compressed digital audiovisual  
 2 data file received from a personal video recorder, the data file having a proprietary  
 3 header, comprising the steps of:  
 4 copying portions of the data file other than the header to yield a non-  
 5 proprietary compressed audiovisual data file;  
 6 storing the non-proprietary compressed audiovisual data in a read/write  
 7 nonvolatile memory unit;  
 8 receiving a user instruction via a user input device;  
 9 responsive to the user instruction, decompressing the compressed  
 10 audiovisual data file in real-time to obtain decompressed video and audio data  
 11 streams; and

12 displaying the video data stream on a display in response to the  
13 received instruction, and outputting at least one audio data stream to an audio output.

1 16. A method for place-shifting audiovisual information recorded by a  
2 personal video recorder, comprising:  
3 receiving compressed video information from the personal video  
4 recorder in a proprietary format;  
5 transforming the compressed video information into a nonproprietary  
6 format;  
7 storing the transformed compressed video information as a media file  
8 on a portable rewriteable nonvolatile memory;  
9 retrieving and decompressing the media file in response to a command  
10 from a user input device into decompressed audio and video information;  
11 displaying the decompressed video information in real time on a  
12 display; and  
13 outputting the decompressed audio information in real time to at least  
14 one of a speaker and an audio jack.

1 17. A method for place-shifting audiovisual information using a portable  
2 digital video player, comprising the steps of:  
3 receiving compressed data in a proprietary format from a personal  
4 video recorder;  
5 storing the received compressed data as a media file on a portable  
6 rewriteable nonvolatile memory;

7                   retrieving, transforming and decompressing the media file into a  
8                   decompressed video stream and a decompressed audio stream in response to a  
9                   command from a user input device of the player;  
10                   displaying the decompressed video stream in real time on a display of  
11                   the player; and  
12                   outputting the decompressed audio stream in real time to at least one of  
13                   a speaker and a audio jack of the player.

1                   18.   Self-contained, portable apparatus for place-shifting audiovisual  
2                   information recorded by a personal video recorder, comprising:  
3                   means for receiving compressed video information in a proprietary  
4                   format from the personal video recorder;  
5                   means for transforming the compressed video information into  
6                   nonproprietary compressed video information;  
7                   means for storing the nonproprietary compressed video information on  
8                   a portable rewriteable nonvolatile memory;  
9                   means for retrieving and decompressing the nonproprietary,  
10                   compressed video information into decompressed video and audio streams;  
11                   means for displaying the decompressed video stream in real time on a  
12                   display; and  
13                   means for outputting at least one decompressed audio stream in real  
14                   time to at least one of a speaker and an audio output port.

1           19. Self-contained, portable apparatus for place-shifting audiovisual  
2 information recorded by a personal video recorder, comprising:  
3           means for receiving compressed video information in a proprietary  
4 format from the personal video recorder;  
5           means for storing the proprietary format compressed video information  
6 on a portable rewriteable nonvolatile memory;  
7           means for retrieving the stored, proprietary compressed video  
8 information responsive to a command from a user of the apparatus;  
9           means for transforming the retrieved, compressed video information  
10 into nonproprietary compressed video information; and for decompressing the  
11 nonproprietary, compressed video information into decompressed video and audio  
12 streams;  
13           means for displaying the decompressed video stream in real time on a  
14 display; and  
15           means for outputting at least one decompressed audio stream in real  
16 time to at least one of a speaker and an audio output port.

1           20. A video data recording and playback system, comprising:  
2           a cradle having a compressed video data input port, a compressed  
3 video data output port coupled to the compressed video data input port, an analog  
4 audiovisual input port, an encoder having an input coupled to the analog audiovisual  
5 input port for producing a compressed video data signal responsive to receiving  
6 analog audiovisual data, and an output of the encoder coupled to the compressed



7 video data output port, the cradle further having an analog audiovisual output port  
8 coupled to the analog audiovisual input port; and  
9 a portable player removably connectable to the cradle, the portable  
10 player having a display for displaying a video portion of an analog audiovisual signal,  
11 at least one audio output for playing an audio portion of the analog audiovisual signal,  
12 a compressed video data input port, a processor of the portable player coupled to the  
13 compressed video data input port for receiving compressed video data, a storage  
14 medium of the portable player controlled by the processor to record compressed video  
15 data and to have read therefrom compressed video data, the processor reading  
16 compressed video data from the storage medium, decompressing the read, compressed  
17 video data into an analog audiovisual signal, transmitting a video component of the  
18 audiovisual signal to the display and transmitting an audio component of the  
19 audiovisual signal to the audio output of the player, and a user command input device  
20 coupled to a control input of the processor to control recording and playback  
21 functions of the processor, the compressed video data input port of the portable player  
22 being connected to the compressed video data output port of the cradle when the  
23 portable player is connected to the cradle.

1 21. The system of Claim 20, wherein the cradle further comprises a storage  
2 medium coupled to the compressed video data output port, the output of the encoder  
3 and the compressed video data input port, the storage medium storing compressed  
4 video data.

1           22. The system of Claim 20, wherein the cradle further comprises a  
2           decoder having an output coupled to the analog audiovisual output port and an  
3           input coupled to the compressed video data input port, the decoder decoding a  
4           compressed video data signal into an analog audiovisual signal.

Year	Month	Day	Time	Location	Observer	Notes
1970	March	10	10:00	1000 ft	W. J. Smith	1st record
1971	April	15	14:00	1000 ft	W. J. Smith	2nd record
1972	May	20	16:00	1000 ft	W. J. Smith	3rd record
1973	June	25	18:00	1000 ft	W. J. Smith	4th record
1974	July	30	20:00	1000 ft	W. J. Smith	5th record
1975	August	5	22:00	1000 ft	W. J. Smith	6th record
1976	September	10	24:00	1000 ft	W. J. Smith	7th record
1977	October	15	26:00	1000 ft	W. J. Smith	8th record
1978	November	20	28:00	1000 ft	W. J. Smith	9th record
1979	December	25	30:00	1000 ft	W. J. Smith	10th record